

Title (en)

MULTIPLE LAYERED LIPOSOME AND PREPARATION METHOD THEREOF

Title (de)

MEHRSCHICHTIGES LIPOSOM UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

LIPOSOME MULTICOUCHE ET PROCEDE DE PREPARATION CORRESPONDANT

Publication

**EP 1773298 A1 20070418 (EN)**

Application

**EP 04748522 A 20040806**

Priority

KR 2004001989 W 20040806

Abstract (en)

[origin: WO2006014035A1] Disclosed are multilayered liposomes for transdermal absorption and a method of preparing the liposomes. The multilayered liposomes are prepared using a mixture of oil-phase components comprising squalane, sterols, ceramides, neutral lipids or oils, fatty acids and lecithins, is 200 to 5000 nm in particle size, and is capable of entrapping a physiologically active substance. The multilayered liposomes entrap a larger amount of a physiologically active substance and are structurally stable when encapsulating the physiologically active substance, compared to unilamellar liposomes. Also, they are prepared by a simple and cost-effective process not using a high-pressure homogenizer but using a general homo mixer. Further, since the multilayered liposomes are prepared in a larger size than the intercellular spaces in the stratum corneum, they overcome the tension of surrounding cells when passing through the intercellular spaces and are thus able to penetrate into the dermal layer, compared to nano-sized unilamellar liposomes. Thus, the multilayered liposomes are useful for enhancing the transdermal absorption of physiologically active substances.

IPC 8 full level

**A61K 9/127** (2006.01); **A61P 17/16** (2006.01)

CPC (source: EP US)

**A61K 9/0014** (2013.01 - EP US); **A61K 9/127** (2013.01 - EP US); **A61P 17/16** (2017.12 - EP)

Citation (search report)

See references of WO 2006014035A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2006014035 A1 20060209**; EP 1773298 A1 20070418; JP 2007522205 A 20070809; JP 4758915 B2 20110831;  
US 2007082042 A1 20070412

DOCDB simple family (application)

**KR 2004001989 W 20040806**; EP 04748522 A 20040806; JP 2006553042 A 20040806; US 57916304 A 20040806